



**WELCOME**

TO THE INTRODUCTORY  
POWERPOINT FOR THE DCN  
TRAINING



**BEST PRACTICES  
PRESCHOOL ASD  
ASSESSMENT**

## ❖ Objectives of this Intro

1. Be familiar with DSM-5 and Education Code criteria
2. Identify red flags for ASD
3. Review standard tools for preschool assessment including cognitive, adaptive, language, and social-emotional
4. Recognize caveats and merits of ASD assessment tools
5. Become familiar with overlaps and differences between ASD and other disabilities

# So that during the live training we can spend more time to

- Engage in case studies and discussion
- Delve into differential diagnosis
- Analyze assessment results
- Explore new ways to report assessment results

# ACCURATE DIAGNOSIS OF ASD



**IS BASED UPON**

**clinical observations**

**developmental history**

**& formal and informal assessment**

# THE INTERDISCIPLINARY TEAM

- Build an assessment team based upon the needs of the student
- In addition, to the **Psychologist** & **SLP**, the following specialists might also be involved in assessment:
  - Teacher
  - Occupational Therapist
  - Behaviorist
  - School Nurse





- Meet/plan as a team prior to the assessment
- Assess together and “tag team”
- Check in with each other during the assessment process
- Integrate and address consistencies and inconsistencies
- Complete and present integrated report



- The **ABSENCE** of typical behaviors/development is more of a **RED FLAG** than presence of ASD-related behaviors
- So, let's review typical development....

# RED FLAGS

## First 2 Years of Life



- Lack of appropriate gaze
- Lack of social smile
- No babbling by 9 months
- Not responding to name
- No gesturing (pointing, waving, peek-a-boo)
- Delay of or no language
- Loss of communication and social skills
- Not knowing how to play with toys; attending more to parts of objects than using them for pretend play or functionally
- Lack of shared enjoyment, joint attention (3-point gaze)
- Unusual sensory responses and repetitive movements for age

For review and more specifics, see CDC and Autism Navigator



# DIFFERENTIATE TYPICAL TYPICAL VS. ASD DEVELOPMENT

- So that you can better understand and gauge what is typical behavior and social interaction
  - Review early child development milestones—See
    - **Assessment Tool Kit**, [www.cdc.gov/actearly](http://www.cdc.gov/actearly), [helpmegrowmn.org](http://helpmegrowmn.org)
    - Spend time with typically developing children
  - Watch videos for comparison of typically developing children vs. those with red flags/ASD

- Watch videos for comparison of typically developing children vs. those with red flags/ASD



## –Kennedy Center Videos

- [www.youtube.com/watch?v=YtvP5A5OHpU&list=PLczm2JcKohRv9rK6WGvR0ks3QWF0fGdoJ](http://www.youtube.com/watch?v=YtvP5A5OHpU&list=PLczm2JcKohRv9rK6WGvR0ks3QWF0fGdoJ)



## –Autism Navigator

- [www.resources.autismnavigator.com/asdglossary](http://www.resources.autismnavigator.com/asdglossary)

## -CDC Autism Case Training online course, video library

- [www.cdc.gov/ncbddd/actearly/autism/video/index.html](http://www.cdc.gov/ncbddd/actearly/autism/video/index.html)

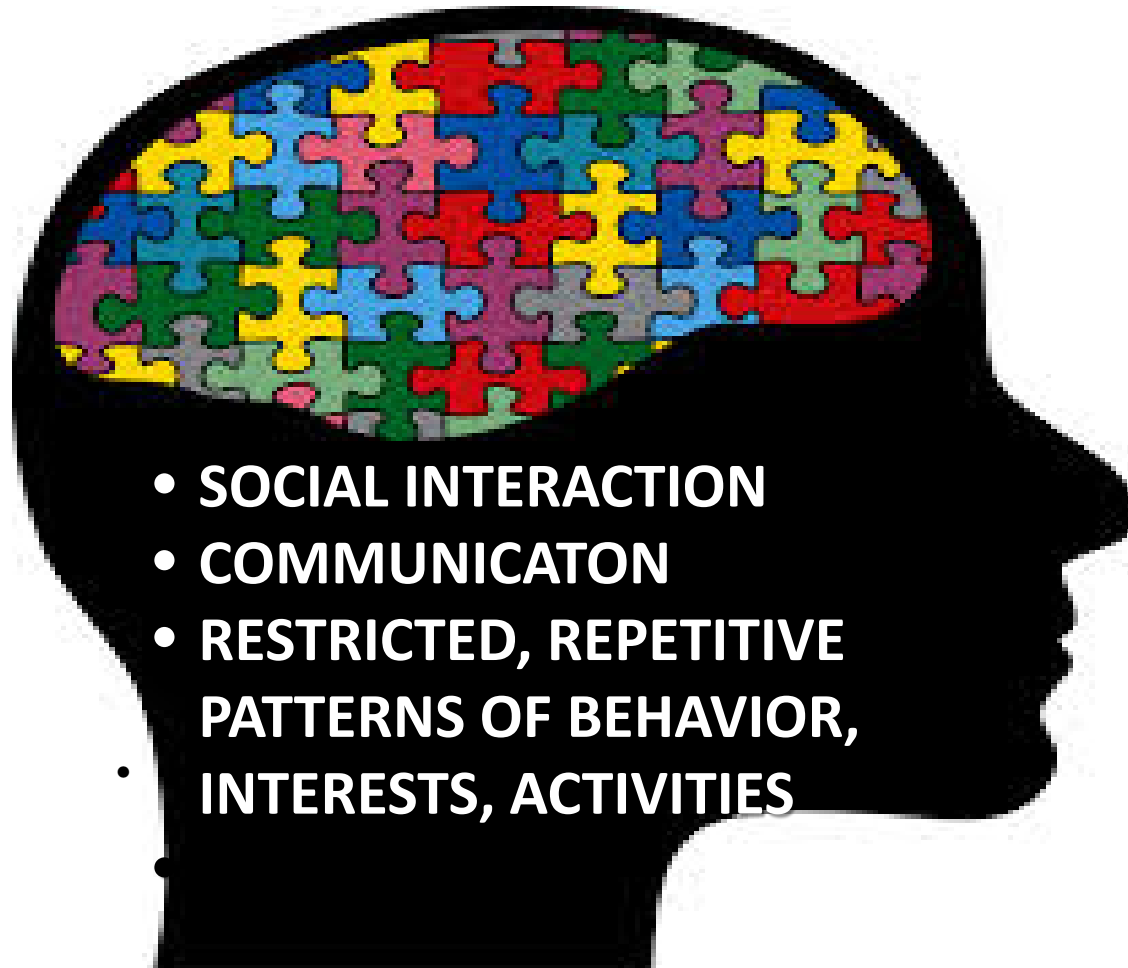
# REMEMBER

## Skills that may be influenced by cultural and linguistic differences include:

- Eye contact
- Proximity
- Interaction rules/styles with adults versus children
- Vocabulary
- Conversational initiation, maintenance and closure



# CORE ASD DEFICITS



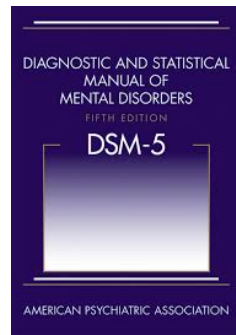
- SOCIAL INTERACTION
- COMMUNICATON
- RESTRICTED, REPETITIVE PATTERNS OF BEHAVIOR, INTERESTS, ACTIVITIES
- 
-

# CA EDUCATION CODE CRITERIA FOR AUTISM

- **CCR criteria more closely matches DSM-5**

**“Autism means a developmental disability significantly affecting verbal and nonverbal communication and social interaction, generally evident before age three, and adversely affecting a child's educational performance. Other characteristics often associated with autism are engagement in repetitive activities and stereotyped movements, resistance to environmental change or change in daily routines, and unusual responses to sensory experiences. Autism does not apply if a child's educational performance is adversely affected primarily because the child has an emotional disturbance, as defined in subdivision (b)(4) of this section.”**

# WHY WE LIKE DSM-5!



- ✎ DSM-5 reflects current understanding of neurodevelopmental disorders better than the Education Code
- ✎ Helps document assessment observations
- ✎ Provides guidance to describe behaviors
- ✎ Includes a dimensional approach to symptoms: severity and impairment
- ✎ Assists with guidelines for interventions and therapies
- ✎ Gives specifics for differential diagnosis

DSM-5	Education Code
<ul style="list-style-type: none"> <li>A. Deficits in social emotional reciprocity</li> <li>B. Deficits in nonverbal communicative behaviors used for social interaction</li> <li>C. Deficits in developing and maintaining relationships appropriate to developmental level</li> </ul>	<p>Autism means a developmental disability significantly affecting <u>verbal</u> &amp; <u>nonverbal communication</u> and <u>social interaction</u>, generally evident before age three, and adversely affecting a child's educational performance.</p>
<ul style="list-style-type: none"> <li>D. Stereotyped or repetitive speech, motor movements, or use of objects</li> <li>E. Insistence on sameness, inflexible adherence to routines or ritualized patterns of verbal or nonverbal behavior</li> <li>F. Highly restricted, fixated interests that are abnormal in intensity or focus</li> <li>G. Hyper-/ hypo-reactivity to sensory input or unusual interest in sensory aspects of environment</li> </ul>	<p>Other characteristics often associated with autism are engagement in repetitive activities and stereotyped movements, resistance to environmental change or change in daily routines, and unusual responses to sensory experiences.</p>

DSM-5	Education Code
<p>C. Symptoms must be present in the early developmental period</p> <p>D. Symptoms cause clinically significant impairment in social, occupational, or other important area of functioning.</p> <p>E. These disturbances are not better explained by intellectual disability or global developmental delay. ID and ASD frequently co-occur; to make comorbid diagnoses of ASD and ID, social communication should be below that expected for general developmental level</p>	<p>Generally evident before age 3</p> <p>Adversely affecting a child’s educational performance</p> <p>Autism does not apply if a child's educational performance is adversely affected primarily because the child has an emotional disturbance</p>



# Define “adversely affect educational performance” for preschoolers-kinder

Does not:

- Learn or demonstrate pre-academic skills
- Follow directions
- Ask for help, clarification, and information
- Answer questions
- Participate in activities and discussion
- Interact with peers and adults
- Express and regulate emotions
- Others?

# Comorbidity/Co-occurring Disorders and Differential Diagnosis

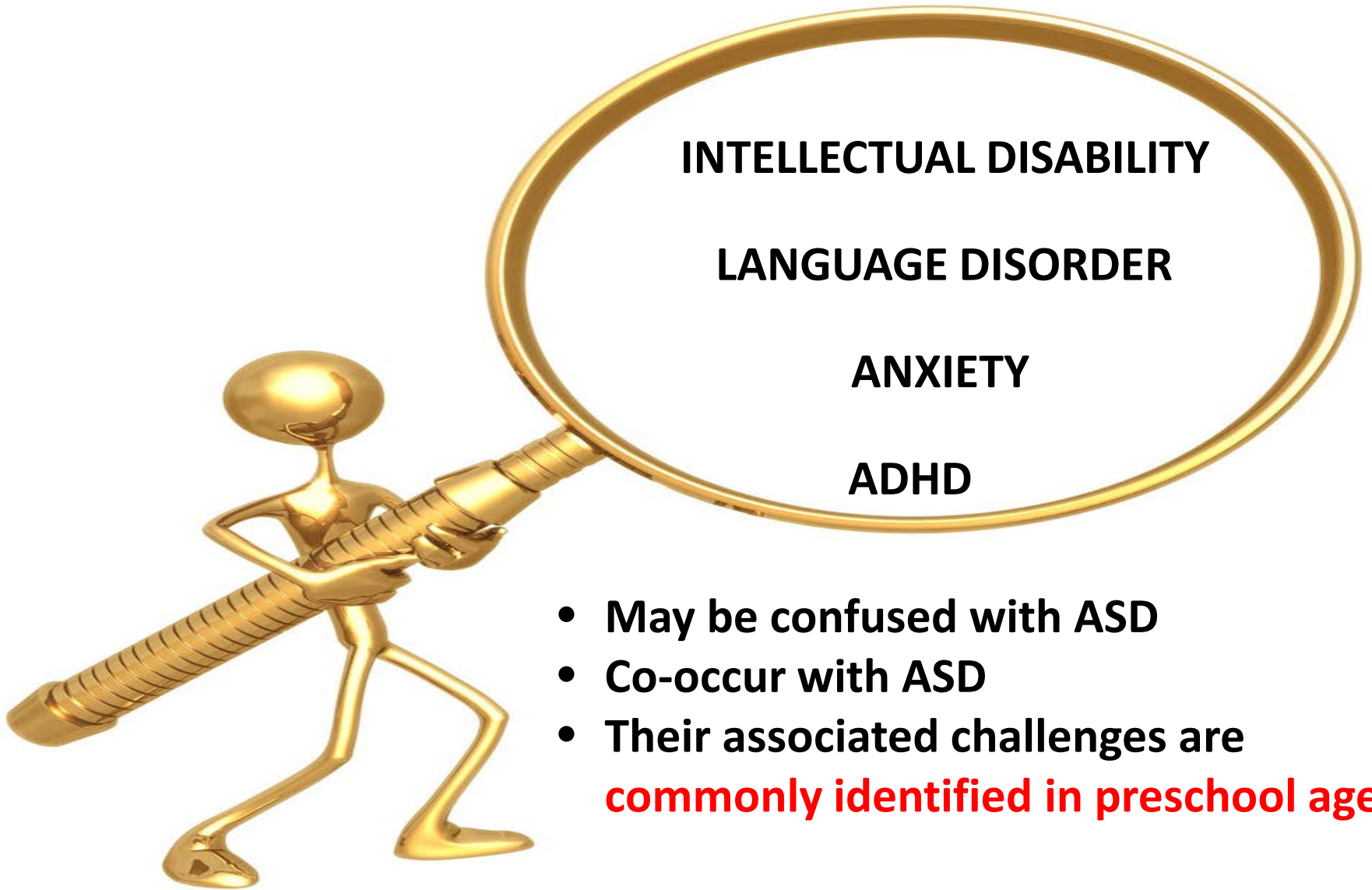
**INTELLECTUAL DISABILITY**

**LANGUAGE DISORDER**

**ANXIETY**

**ADHD**

- May be confused with ASD
- Co-occur with ASD
- Their associated challenges are **commonly identified in preschool age**



# Differential Diagnosis



- Determine explanations for student's challenges. Are they due to ASD, another disability, or both?
- What are the student's main challenges?
- What is the cause of these challenges?
- What diagnosis best explain the student's profile?
- What additional information is needed to determine the student's disability/disabilities?

# ASD

# vs.

# ID

Symptom Overlap	Key Difference with ID
Cognitive impairment	Global developmental delays (delays across all areas of functioning); less scatter
Social impairments Adaptive Skills	<ul style="list-style-type: none"><li>• More social motivation, awareness, interest, i.e. joint attention &amp; reciprocity</li><li>• Social skills relative strengths</li></ul>
Limited play skills	<ul style="list-style-type: none"><li>• Play skills consistent with other abilities</li><li>• Plays like a younger child but demonstrates more interest in imaginative play and playing with others</li></ul>
Language impairments: <ul style="list-style-type: none"><li>• receptive and expressive</li><li>• repetition/echolalia</li></ul>	<ul style="list-style-type: none"><li>• Language consistent with other abilities</li><li>• Less echolalia and other language atypicality</li></ul>
Limited behavioral repertoire	<ul style="list-style-type: none"><li>• Behaviors more consistent with developmental levels</li></ul>

# Intellectual Disability

- **“Rates of Stereotypic Behavior.** It has been established repeatedly that excessive motor stereotypy (i.e. flapping, spinning, rocking) **is associated with greater degrees of cognitive impairment** and is often found in the non- autistic, **(intellectual disabled)** populations.” (Howlin 1998, Wing 1988)
- **High rates of repetitive sensory motor behaviors** are prevalent in children with global developmental delays (Carcani-Rathwell et al., 2006).

# ASD

# vs. Language Disorder

Symptom Overlap	Key Difference with Language Disorder
Language delays/impairments	<ul style="list-style-type: none"><li>• Intent to communicate</li><li>• More nonverbal communication</li></ul>
Impaired social communication skills	Social relatedness and interest
Processing difficulties	Responsive to initiations by others
Peer relationships lacking	Interest in others' activities and topics of conversations
Echolalia	Less repetitive/stereotyped behaviors
Limited play skills	Self help skills higher

# SOCIAL (PRAGMATIC) COMMUNICATION DISORDER

## *DSM-5*

- Page 51: “Individuals who have marked deficits in social communication, but whose symptoms do not otherwise meet criteria for ASD (i.e., NO restricted, repetitive behaviors), should be evaluated for SCD.”

Social (Pragmatic)  
Communication Disorder

# ASD

vs.

# ADHD

Symptom Overlap	Key Differences with ADHD
Executive functioning & attention deficits	Normal developmental of early motor, social, emotional
Working memory, retrieval, processing speed	Better theory of mind
Social skill deficits / social immaturity	Presence of early social markers, social intuition and motivation
Difficulty following group norms	Response to novelty
Self regulation & sensory difficulties	Learning aided via emotional connection
Fine motor and coordination skills	Higher adaptive skills
Language delays	Language delays more mild, develop nonverbal communication skills
Impairments in eye contact	Integrates eye contact with gestures but eye contact is fleeting
	Later age to identify

Can be comorbid per DSM-5



# ASD

vs.

# Anxiety

Symptom Overlap	Key Differences with Anxiety
Limited coping and self regulation	Less sensory differences
Rigidity	More creativity; more responsive to (creative) play therapy techniques
Perfectionism	More self consciousness and self deprecating thoughts
Cognitive inflexibility	Show more abilities to understand others' perspectives and empathize
Difficulty integrating with peers	Wishes they would integrate with peers
Poor focus	Worry interferes with focus (vs. restrictive interests & behaviors interfering with focus)
High risk of developing anxiety disorder	

# ASD

vs.

# (Social) Anxiety

Symptom Overlap	Key Differences with Anxiety
Both can demonstrate delays in speech/language	Normal developmental history for motor, social, emotional
<ul style="list-style-type: none"><li>• Impairments in social interactions and relationships</li><li>• Difficulty integrating with peers</li></ul>	<ul style="list-style-type: none"><li>• Presence of early social markers, social intuition and motivation</li><li>• Engages in typical social interactions with a few trusted individuals</li><li>• Does not interact due to fear of rejection</li></ul>
Demonstrates limited social skills	<ul style="list-style-type: none"><li>• Social skills improve in small groups</li><li>• More spontaneously learns social rules</li></ul>
Perfectionism	Fear of being judged
Misses cues	Oversensitive to cues; constantly thinks of what others think of her
Difficulty taking other's perspective	Hypervigilant theory of mind; Constantly thinking about what others think of her; tend to have negative over-interpretation

# Best Practices

## ASSESSMENT FRAMEWORK

R

Review

I

Interview

O

Observe

T

Test

# BEST PRACTICES ASSESSMENT FRAMEWORK

- Informal stronger than formal
- Use standardized testing for levels of functioning and to substantiate conclusion
- Analyze and integrate information
- Differentiate diagnoses



# THROUGHOUT THE ASSESSMENT CONSIDER:

- Is this typical behavior given the child's developmental age?
- Would there be other diagnoses or factors that would account for the child's challenges?
- What are the Red Flags?



# Assessment Tools

## What about ASD specific tools?

- “Direct observations should be given more weight than the report of others” (CARS2 manual, p. 6)
- “Parents(or others) should not be handed a protocol to complete. Information should be made via interviews” (Harbottle Law Group 2016 at ACSA Conference, 3/2016)
- Preferable to use tools based on multiple sources of information
- Even ADOS-2 results should be interpreted with caution and remember that scores above the cutoff do not equal an ASD diagnosis

# Best Practices

## ASSESSMENT FRAMEWORK

R	I	O	T
Review	Interview	Observe	Test

# REVIEW

- What were initial concerns?
- Diagnostic impressions
- Look for evidence of red flags
- Review comments about socialization, communication and behavior
- If there is a discrepancy of behaviors and skills; develop hypotheses for these



# Review

Review records for history of concerns, services provided, and progress

- ☐ Early childhood records for red flags
- ☐ Medical records
- ☐ Previous assessment reports
- ☐ Early intervention & treatment summaries
- ☐ Daycare/preschool records
- ☐ Videos and/or pictures

# DAY CARE / PRESCHOOL RECORDS

- Behavioral concerns
  - Aggression, hitting, tantrums
  - Transitions
  - Crying
- Communication
- Play/social skills/peer relationships
- Skills compared to peers
- Interventions attempted and results
- Levels of supports required



R

Review

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Interview/  
Input

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Observe

T

Test

# PARENT INPUT

- Detailed developmental history
- Initial Concerns
- Temperament and behavioral concerns
- Communication delays and concerns
- Reciprocity, social skills, and friendships
- Informal and structured interviews



# PARENT INPUT

- Preferred activities and interests
- Play skills
- Sensory issues
- Medical history
- Family history of developmental problems mental health disorders, and social difficulties

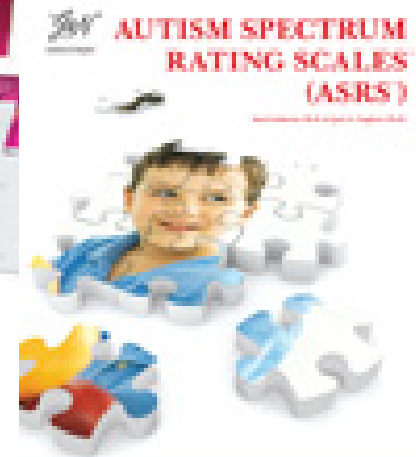
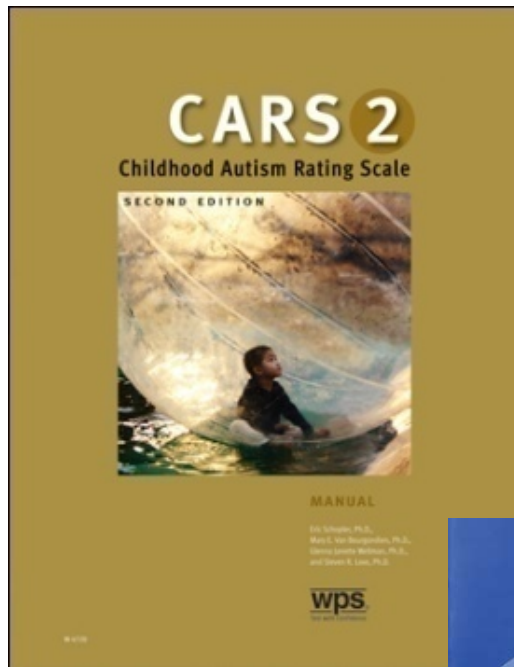


# PRE-INTERVIEW/INPUT

- Consider having parent(s) complete a questionnaire or rating scale **before** interviewing them
- Review their responses to determine what areas to clarify with them, and to identify consistencies and inconsistencies
- Then, use this information to structure interview

# PRE-INTERVIEW/INPUT

## Autism Questionnaires/Scales/ Screeners



# CAVEAT: **ASD Screeners**

- **Identify** those children in need of an in-depth assessment or further diagnostic evaluation
- **Over-identify** by design
- Are subject to rater bias
- Often not psychometrically strong
- **Do not make a diagnosis**
- A cutoff score indicates that there is a certain **likelihood that the individual has ASD**





**IF YOU DECIDE TO USE AN  
AUTISM RATING SCALE OR  
SCREENER**

**WE SUGGEST:**

- *CARS-2 QPC*
- *GARS-3: Gilliam Autism Rating Scale, 3<sup>rd</sup> Edition*
- *Social Communication Questionnaire (SCQ)*
- *Social Responsiveness Scale- 2 (SRS-2)*
- *Autism Spectrum Rating Scales*

## GARS-3

- 2014; items and subscales reflect DSM-5 criteria for ASD
- Ages 3-22; 5-10 minutes
- Frequency-based rating scale completed by parent, teacher, or caregiver
- Consists of 56 items describing the characteristic behaviors of persons with autism grouped into six subscales (Restrictive/Repetitive Behaviors, Social Interaction, Social Communication, Emotional Responses, Cognitive Style, and Maladaptive Speech)
- Yields standard scores, percentile ranks, severity level, and **assesses the probability of autism spectrum disorder** and the severity of the disorder
- **Caveat: Be very cautious in using with individuals who may have ID—small norm sample and higher scores**



## SRS-2

- Updated in 2012-parent and/or teacher rating scale
- 65 Likert items; 15-20 minutes to complete
- Preschool version is ages 2 ½ to 4 ½
- Overall score, two *DSM-5* compatible scales , 5 treatment areas
- **Caveat: beware of rater bias; parents tend to rate higher**
- Purports to identify ASD and “subclinical autistic traits”
- An elevated score can reflect other disorders (SLI, ID or ADHD)
- “For preschoolers especially, it is important to

**consider whether SLI or ID contribute  
to  
suspected deficits” (Manual, page 19)**



# SCQ



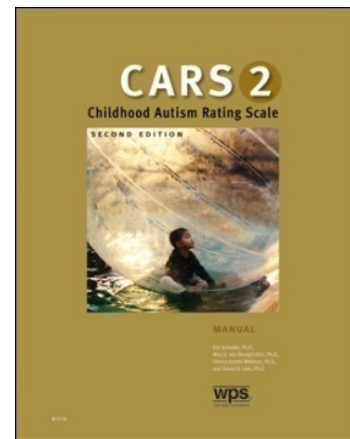
- Parent screener, consisting of 40 true/false ratings
- Published in 2003
- 10 minutes to complete
- Two versions
  - ✓ Lifetime – for initial screening purposes; single cut-off score
  - ✓ Current – for identified individuals; use to measure progress
- Forms available in Spanish
- High validity with ADI-R
- For ages 4+, but developmentally above age 2
- Current research indicates that SCQ is **less accurate for children under 36 months** (Oosterling et al., Journal of Child Psychiatry and Psychiatry, 2010)

# ***CHILDHOOD AUTISM RATING SCALE-2***

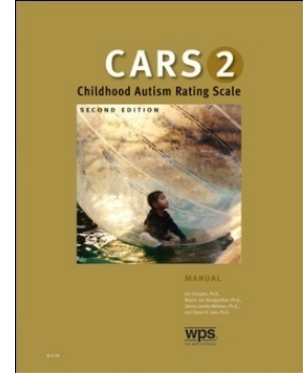
## ***CARS-2***

### ***Questionnaire for Parents or Caregivers (QPC)***

- First part of CARS-2 system
- Questions organized by main areas of behavior related to autism, i.e. communication, emotions, sensory, play, and routine
- Parent rates each item by current severity, or whether item was a problem in the past
- Does not result in score but assists in identifying parents' areas of concern



# ***CARS-2 QPC Examples***



- Responds to facial expressions, gestures, and different tones of voice
- Directs facial expressions to others to show emotions he/she is feeling
- Follows another person's gaze or points toward an object that is out of reach
- Shows a range of emotional expression that match the situation
- Understands and responds to how another person may be thinking or feeling
- Uses toys or other materials to represent something they are not

# ***BROAD BAND BEHAVIOR RATING SCALES***



- ASEBA

- Conners Early Childhood

- SSiS



## What Scales are most related to ASD?

- Withdrawal
- Atypicality
- Developmental Social Disorders and [Autism Probability](#)
- Attention, Hyperactivity
- Adaptive Scales (activities of daily living, adaptability, functional communication, social skills, leadership)
- Anxiety, Depression and content scales that are related to emotional regulation difficulties



# SPECIFIC BASC3 ITEMS

- **Social skills items:**

- Offers to help (peers)
- Compliments others (peers)
- Volunteers to help with things
- Shows interest in others' ideas
- Makes others feel welcome
- Makes positive comment about others
- Encourages others to do their best
- Accepts others who are different from his or her self

- **Functional Communication items:**

- Starts conversations
- Communicates clearly / is unclear when presenting ideas
- Responds appropriately when asked a question
- Is clear when telling about personal experiences
- Is able to describe feelings accurately
- Has trouble explaining rules of game to others
- Has trouble getting information when needed; tracks down information

# ***ACHENBACH SYSTEM OF EMPIRICALLY BASED ASSESSMENT (ASEBA)***

- Parent, daycare provider and teacher versions
- **Preschool forms, ages 1 ½-5 (100 questions)**
- Ages 6-18
- **Scales:**
  - Adaptive
  - Anxious / Depressed
  - Withdrawn / Depressed
  - Somatic Complaints
  - Social Problems
  - Thought Problems
  - Attention
  - Rule-Breaking Behavior
  - Aggression
- Also includes updated DSM-5 norms
- Includes language development survey for 18-35 months

Sample Form – <http://www.aseba.org/forms/preschoolcbcl.pdf>

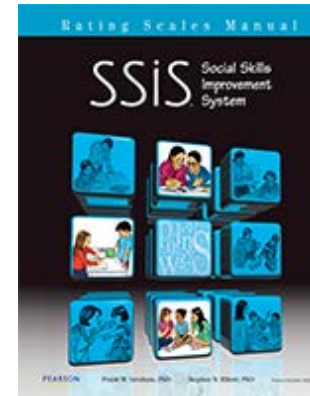
# Conners Early Childhood

- Ages 2-6, 2009
- ~ 190 items for parent and teacher (25 minutes to complete); software or online scoring & reports
- **Behavior scales** : Inattention/Hyperactivity, Oppositional/Aggressive Behaviors, Social Functioning/Atypical Behaviors, Anxiety/Mood/Affect, Physical Symptoms
- **Developmental Milestones scales**: adaptive communication, motor skills, play, pre-academic/cognitive
- Global & validity indexes



# SSiS

- 2008; Parent and/or Teacher Forms
- Ages: 3-18 years
- Yields Standard Scores
- Includes three main scales:
  - Social Skills (\*communication, cooperation, assertion, responsibility, \*empathy, \*engagement, self-control)
  - Competing Problem Behaviors (externalizing, bullying, hyper/inattentive, internalizing, \*Autism Spectrum Disorder)
  - Academic Competence



*\*Especially helpful to identify ASD characteristics*

# SOCIAL LANGUAGE RATING SCALES

- *CELF Preschool-2, Pragmatics Profile* (ages 3-6:11)
- *Children's Communication Checklist-2 (CCC-2)*; ages 4+
- *CELF-5 Observation Rating Scale, Pragmatics Profile*; ages 5+
- *Pragmatic Language Skills Inventory (PLSI)*; ages 5+





## Pragmatics Profile

- 2004; age 3-6.11
- Yields Criterion Score for age
- Rated by teacher and/or caregiver
- 26 items in three areas:
  - Nonverbal Communication Skills
  - Conversational Routines and Skills
  - Asking for, Giving, and Responding to Information

R

Review

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Interview

O

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T

Test

# PARENT INTERVIEW TIPS



- Open-ended questions
- More specific questions to clarify
- Review anything from records, history, and pre-interview responses that is unclear or inconsistent
- Review current and past concerns



# EXAMPLES OF OPEN-ENDED QUESTIONS

- When did you first become concerned? What were your concerns? What are your current concerns?
- How did your child's development differ from that of his siblings?
- How does he let you know when he needs something? How did he let you know when he first started communicating?
- Tell me about his imitation skills; does he spontaneously copy what you do or do you have to teach him? When did he begin imitating you? How did this look like?
- What are his interests?
- What are his favorite toys and games?



# PARENT INTERVIEW

## Additional examples of open-ended questions

- Describe what he did/does with toys and how he played/plays? (Probe for pretend, sequencing, variety, interactions with dolls, animal or action figures)
- What does he look like at the park or recess?
- Tell me about his friendships and interest in other kids?
- How does he play with other kids?
- How does he get along with his siblings?
- When and how does he interact with others?
- How does he respond when other children approach or invite him to play?



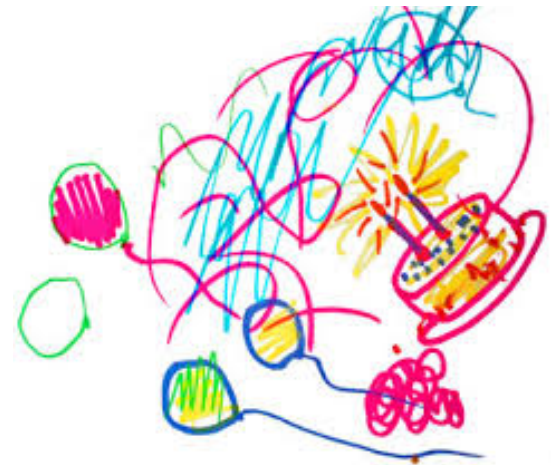
# PARENT INTERVIEW

- How does he communicate his feelings to you and others?
- How does he respond to others when they are sad or upset?
- Describe any sensitivities (sound, touch, texture, food) and lack of sensitivity (pain, temperature).
- How does he respond to changes in routines and schedules?
- Are there any things he seems to have to do in a particular way or order?
- What motivates him?
- What do you enjoy doing together?



# ADDITIONAL PARENT INPUT

- Ask parents to describe:
  - Child's strengths and special skills
  - Behaviors during birthday parties and celebrations
  - Daycare/preschool experiences
  - How outings in the community look like (stores, restaurants, church, visiting relatives or family)



# ADAPTIVE FUNCTIONING



- Every day skills that individual performs
- All individuals with ASD demonstrate adaptive deficits
- Adaptive functioning overlaps with other areas and can provide additional information about autism related behaviors
- **I recommend that an Adaptive Scale be completed in-person with parent** rather than giving them a rating scale

# ADAPTIVE SCALES

## ➤ For lower functioning:

- ***DASH-3*** (6 months-adult), ***DAYC2*** (ages 0-5 yrs), ***PES-2*** (ages 0-6 yrs)

## ➤ ***DP-III*** (normed ages 0-12)

## ➤ ***Vineland Adaptive Behavior Scales- 3***

- Parent Interview Form (ages 0-90)
- Parent/Caregiver Form (ages 0-90)
- Teacher form (ages 3-21)

*Comprehensive or Domain – Level forms available*

## ➤ ***Adaptive Behavior Assessment System-3***

- Parent Interview Form (ages 0-18)
- Parent/Caregiver Form
- Teacher form (ages 2-5)

# ADAPTIVE SCALES

## TIPS



- Collect information from more than one source, i.e. teacher and parent
- Parent interview preferable to rating scale
- Review and interview for inconsistent responses or omitted info
- Verify that raters report skills that child performs on a regular basis

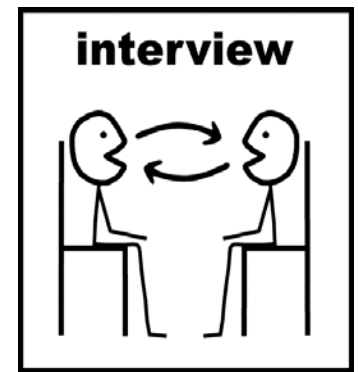
# CLASSROOM DIFFICULTIES

- Transitions between activities
- Tolerating changes
- Inconsistent attention
- Uneven abilities
- Learn better visually
- Remember things rotely
- Understanding abstract concepts
- Generalizing learned information
- Inconsistent motivation to perform
- Problem solving skills
- Picking up and understanding social rules
- Fine motor, writing and drawing skills





# TEACHER INPUT/INTERVIEW



- How does the student's behavior compare to age peers in his/her program?
- What are the times/conditions under which he functions better and worse?
- How typical is (assessor) observed behavior?
- What strategies/interventions have been effective?
- Input for setting up your testing sessions including: schedule, attention span, reinforcers, and transition needs

R

Review

I

Interview

O

Observe

T

Test

# Logging Observation Information

**Observe through a variety of lenses including:**



1. Pre-interview and interview data
2. Multiple settings
3. Engineered observations
4. ASD-specific observation systems
5. *DSM-5* review form

# Observe in Multiple Settings

Structured vs.  
unstructured  
times

Desirable vs.  
undesirable  
activities

Adult directed vs.  
student-directed  
activities

Easy vs. difficult

Familiar vs.  
unfamiliar

Small group vs.  
large group

- And with family vs. peers

# Preschool/Day Care/T-K

- Arrival at school
- Whole class activity
- Small group activity
- Individual activity
- Working with a peer
- Indoor/outdoor play
- Snack/lunch
- Departure
- During “Special” activities; e.g., PE, art, music, library, assembly, fire drill.



# OBSERVATION-COMMUNICATION

- Gestures **Compare to peers!**
- Echolalia
- Perseverative speech
- Understanding and using words
- Prosody (i.e., differences in stress, rhythm, rate, intonation, nasality)
- For higher functioning student:
  - Topic management
  - Conversational ability
  - Understanding nonliteral language
  - Fluidity and application of social communication skills taught

# Checklist of Communicative Functions and Means (Wetherby & Prizant, 2001)

Child's Name: \_\_\_\_\_ Date of Sample: \_\_\_\_/\_\_\_\_/\_\_\_\_ Recorder: \_\_\_\_\_

Context/Activity: \_\_\_\_\_

		COMMUNICATIVE MEANS																	
		PRESYMBOLIC MEANS														SYMBOLIC MEANS			
COMMUNICATIVE FUNCTIONS		Proximity	Eye gaze (gaze shifting)	Physical Manipulation	Reenactment	Tapping/Touching	Crying/Whining	Tantrum	Aggression (hit, scratch)	Self-injury	Giving	Reaching	Pushing away	Pointing	Showing	Waving	Head Nod/Head Shake	Vocalizing	Other:
<b>Behavioral Regulation</b>																			
Request Object																			
Request Action																			
Protest																			
<b>Social Interaction</b>																			
Request Social Routine																			
Request Comfort																			
Greeting																			
Calling																			
Request Permission																			
Showing Off																			
<b>Joint Attention</b>																			
Comment																			
Request Information																			
Provide Information																			
<b>Sharing Emotions</b>																			
Joy, Happiness																			
Distress, Fear, Anxiety																			
Anger																			

# **OBSERVATION-SOCIAL INTERACTION**

- Spontaneously giving and showing
- Spontaneously directing others' attention/commenting
- Shift in eye gaze
- Joint Attention
- Respond to/desire for attention
- Turn taking
- Interacts with others

**Compare to peers !**



# **OBSERVATION-SOCIAL AWARENESS AND RECIPROCITY**

- Approach others / Initiation
- Response to others' overtures
- Awareness of others
- Cuing into others' emotions (peers and teachers)
- Interest in others' actions and reactions
- Spontaneous use of social skills
- Tactfulness, humor, empathy
- Perspective taking

**Compare to peers !**

# PLAY SKILLS

- Use of objects and toys
- Functional pretend play (rolling a car)
- Imaginative play (pretending to talk on phone)
- Symbolic play (pretending an object is another object)
- Creativity and variety of play
- Sequence of actions
- Parallel play
- Interactive play (figures or animals interacting with each other)
- Role play

**Compare to peers !**



# STRUCTURED ASD OBSERVATION TOOLS

- **ADOS-2**
- **Engineered Observations/Pragmatic Probes**
- **CARS2-ST**
- **DSM-5 Review Chart**

# ***AUTISM DIAGNOSTIC OBSERVATION SCHEDULE, SECOND EDITION (ADOS-2)***



# ADOS-2



- Standardized clinical tool intended for individuals suspected of having ASD
- Structured assessment of communication, social interaction, and play or imaginative use of materials
- Includes 5 Modules; each is intended for individuals of different developmental and language levels ranging from toddlers with little or no language to verbally fluent, high functioning children, adolescents or adults.

# *ADOS-2 Continued*



- Examiners set up a series of social “presses” which provide multiple opportunities for students to engage in typical social interaction or exchanges
- Scoring is based on qualitative analysis
- Yields total cut-off scores for “Autism” and “Autism Spectrum” and “Non Spectrum
- Toddler module gives level of concern

# *ADOS-2*

## Advantages



- Psychometrically strong
- Captures ASD-specific behaviors
- Creates context to observe diagnostic behaviors
- Takes into account expressive level and age of student
- Yields rich clinical data (qualitative & quantitative)
- Interesting materials
- Can supplement other observations
- Provides hierarchy of prompting (joint attention, response to name/joint attention, imitation)

# ADOS-2

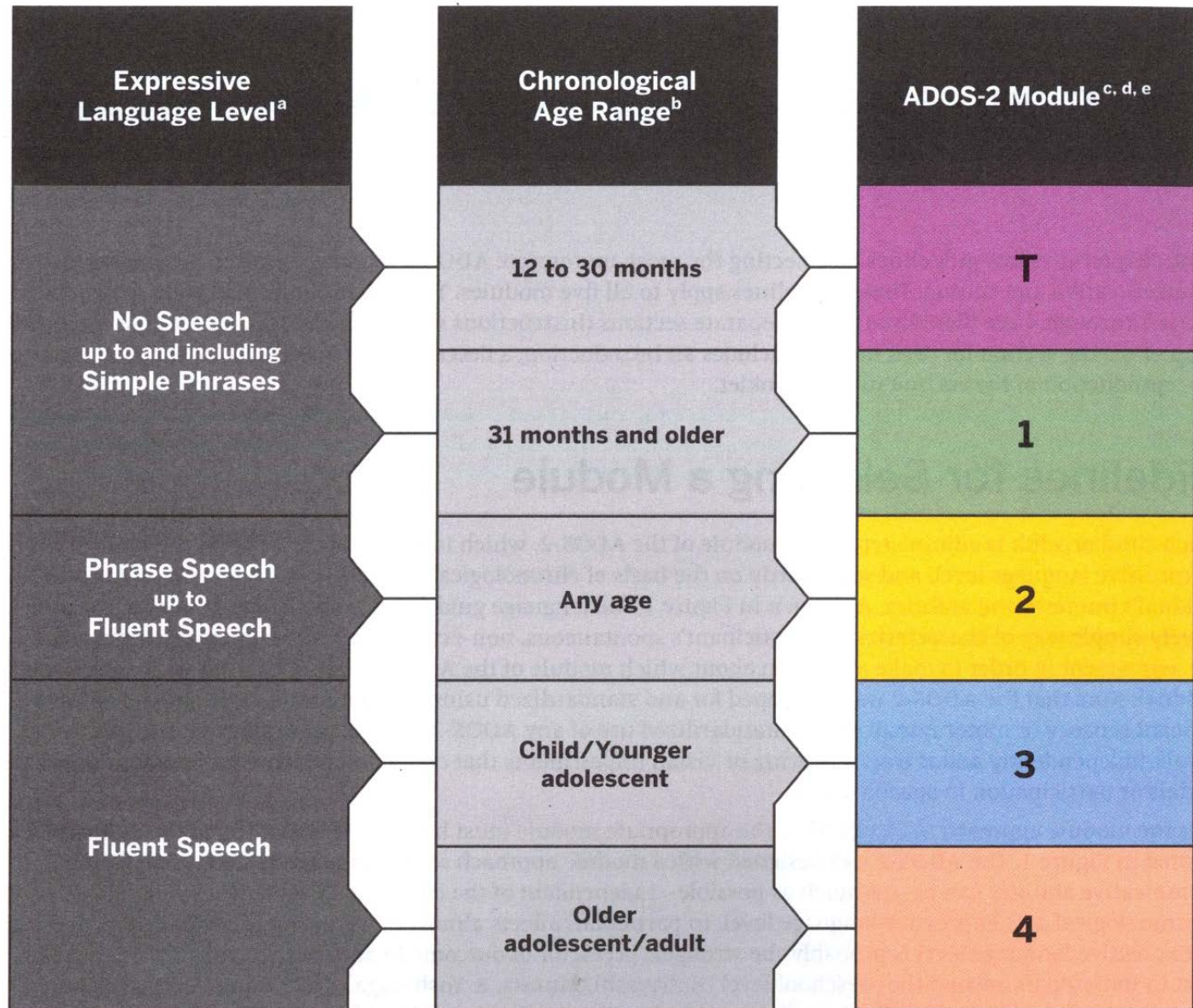
## CAVEATS/DISADVANTAGES



- Scores based on behavior exhibited during administration only
- Requires extensive training, practice & routine use
- Can be challenging to match child with the appropriate module; use of an incorrect module can result in over or under classification
- **Results in classification, not diagnosis**



# **\*NEW\*** Module Selection Guidelines



# PRAGMATIC LANGUAGE PROBES-RHEA PAUL

- Adapted from *Assessing Communication in Autism Spectrum Disorders*, 2005 (with author permission to DCN-2008). See handouts.
- Two sections: Developmentally Younger-verbal or nonverbal; Developmentally Older-verbal (typical for children by age 5-7)
- Provides specific probes to elicit specific communicative responses.

# THINK & SHARE

**With your group, review the next Rhea Paul Probes (Tool Kit, pages 13-15) and determine:**

- **Which probes are you currently using?**
- **Which probes may you want to try?**

# CARS2



CARS2-QPC Questionnaire for Parent/ Caregiver	CARS2-ST Standard Version Rating	CARS2-HF <i>High Functioning Version Rating Scale</i>
An initial form/ questionnaire that can be given to parents	<b>Behavioral ratings based on observations and interviews</b>	<i>Behavioral ratings based on observations and interviews</i>
4 pages of ratings, 1 page of open-ended questions	<b>15 items addressing the functional areas using a 4-point scale</b>	<i>15 items addressing the functional areas using a 4- point scale</i>
Not scorable	<b>Equivalent to original CARS</b>	<i>More specific to higher functioning autism</i>
Good to give as pre-interview, then follow up	<b>For under age 6 or over age 6 with IQ&lt;80, notably impaired communication</b>	<i>For ages 6+, with IQ of 80+, relatively good verbal skills,</i>

# CARS2 Advantages

Use of CARS2-ST as:

- a guide when you are observing child and throughout the RIOT process
- a tool to collaborate with your team members
- at end of assessment to analyze and integrate data

# CARS2 Advantages

- Good psychometric qualities, i.e. reliability, validity, norms
- Lots of research
- Moderate to strong correlations with gold standard instruments (i.e., ADOS, ADI-R, etc.)
- HF version contains data related to up-to-date constructs, e.g. Theory of Mind

# CARS2-ST Rating Items

1. Relating to People	9. Taste, Smell, Touch Response and Use
2. Imitation	10. Fear or Nervousness
3. Emotional Response	11. Verbal Communication
4. Body Use	12. Nonverbal Communication
5. Object Use	13. Activity Level
6. Adaptations to Change	14. Level and Consistency of Response
7. Visual Response	15. General Impressions
8. Listening Response	

# CLINICAL EVALUATION OF LANGUAGE FUNDAMENTALS – 5 (CELF-5)

## Pragmatics Activities Checklist

- 2013; **ages 5-21.11**
- Teacher/parent raters
- Identifies verbal and nonverbal behaviors that may influence social and academic communications.
- **The examiner engages the student in conversation during selected activities (e.g., making a paper airplane, having a snack) and observes the student's functional communication skills during the interactions.** The examiner completes the Checklist after the activities are completed.
- Yields an age criterion score.





R

Review

I

Interview

O

Observe

T

Test

# STUDENTS WITH ASD TEND TO HAVE DIFFICULTY WITH REQUISITE TEST TAKING BEHAVIORS:

- Attention span
- Pointing response
- Response on demand
- Imitation
- Desire to please



# UN “TEST”ABLE...”



Photo © National Autism Association



Maybe...But NOT

# UN “ASSESS”ABLE

# TESTING GUIDELINES



- ✓ More flexibility and informal methods are recommended for assessment of both preschoolers and students with ASD
- ✓ After **R**evue, **I**nterview, and **O**bserve, it is easier to determine what and how to directly **T**est
- ✓ Select instruments familiar to you!
- ✓ Choose a test that taps into the child's current abilities and developmental levels



- **Use** the student's **visual strengths**
- **Alternate** difficult tasks with tasks/tests/items that are less challenging
- **Offer choices** of order of tasks
- **End before** the student is exhausted

# SUPPORTIVE TOOLS AND STRATEGIES

- Visual Schedule
- Sticky Pads
- White Boards
- Time Timer
- Tally Marks
- First-Then cards
- Call tasks “warm-ups” rather than “tests”
- Reinforcers/Sticker Charts
- Game/Play/Movement Breaks



**FIRST**



do puzzle



**THEN**



Play with train

## AREAS TO ASSESS:

- Cognitive and Learning
- Language/Communication
- Behavior, including adaptive
- Pre-Academic
- Sensory Motor



**REMEMBER...these areas are  
interrelated!**



# MULTI-DIMENSIONAL DEVELOPMENTAL TESTS

- Tap multiple areas of development including cognitive, communication, pre-academic, motor, adaptive, social emotional
- Different forms can be use by different specialists
- Can be used as screeners or for more in depth
- Assist in determining levels of functioning
- Compatible with the R-I-O-T model

# MULTI-DIMENSIONAL DEVELOPMENTAL TESTS

	Cognitive	(Pre-) Academic	Adaptive	Communication	Physical/ Motor	Social- Emotional
DASH-3		✓	✓	✓	✓	
DAYC-2	✓		✓	✓	✓	✓
DP-III	✓		✓	✓	✓	✓
Mullen	✓ <sub>Visual Reception / EL Scale</sub>		✓	✓	✓	

# MULTI-DIMENSIONAL DEVELOPMENTAL TESTS

	Cognitive	(Pre-) Academic	Adaptive	Communication	Physical/ Motor	Social- Emotional
Ordinal Scales	✓		✓	✓	✓	✓
PEP-3	✓		✓	✓	✓	
<b>PES-2</b> (Hawthorne)	✓		✓	✓ Expressive language skills	✓	✓
Brigance IED III		✓	✓	✓	✓	✓

# ASD COGNITIVE PROFILE

- Wide range of abilities
- Uneven and difficult to quantify
- At younger ages, often  $NVIQ > VIQ$
- About  $\frac{1}{2}$  demonstrate cognitive impairment with a larger percent at younger age
- Strengths often include rote memory, visual perception, and pattern recognition
- Weaknesses often include verbal, abstract reasoning, and integration



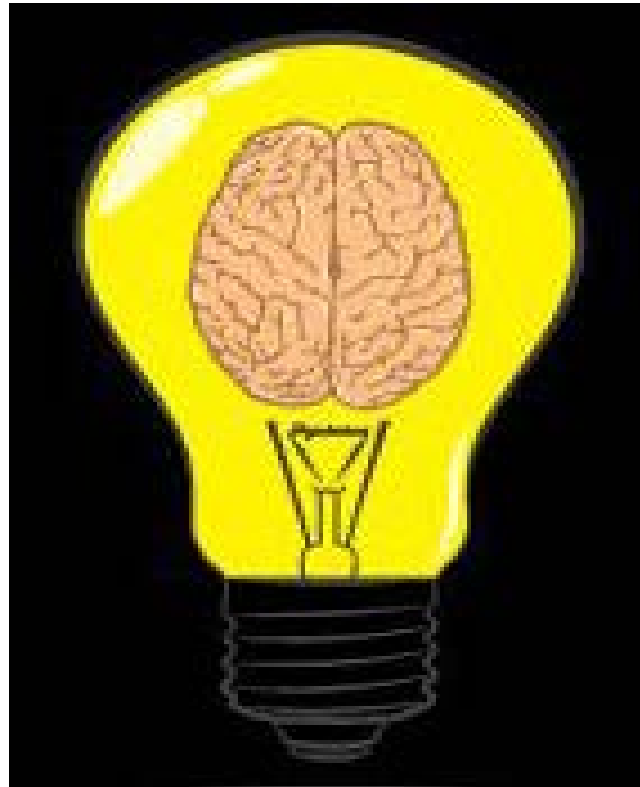
# CAVEATS



- ✓ **Cognitive ability can change over time; keep in mind that standardized test scores **lack stability for all children under 5, are likely even more unstable for individuals with ASD****
- ✓ **Be careful** not to confuse splinter skills with overall cognitive functioning
- ✓ **Be careful** to distinguish rote memory from other areas of cognition

# COGNITIVE INSTRUMENTS

- *DAYC-2*
- *DASH-3*
- *CAYC*
- *Mullen Scales*
- *Ordinal Scales*
- *PEP-3 Cognitive*
- *PES-2*
- *KABC- II*
- *DAS-II Early Years*
- *WPPSI-IV*
- *Bayley-III*



# FOR **ALL** STANDARDIZED TESTING:

- Validate with multiple sources, i.e. observations, other instrument(s), and information provided by caregiver(s) and teacher(s)
- **Consider using age ranges instead of or in addition to standard scores**
- Monitor progress, and keep in mind that **scores at younger ages are less stable**



# COMMUNICATION TESTING





# **COMMUNICATION ASSESSMENT INCLUDES:**

- **Expressive & Receptive Vocab**
- **Language Analysis**
- **Social/pragmatic skills**
- **Voice and prosody**
- **Syntax (and grammar) and morphology**
- **Articulation/phonology**
- **Alternative & Augmentative Communication**



# **FOR NONVERBAL OR PREVERBAL STUDENTS**

## **CHOOSE TESTS THAT HELP YOU ASSESS:**

- Use of eye contact
- Joint attention
- Shared enjoyment
- Gesture use
- Play skills

- Communicative functions
- Intentional communication
- Social Referencing

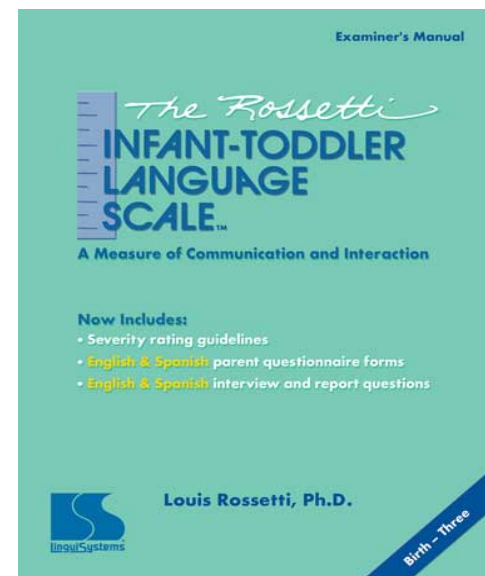
*The Role of the SLP in Autism Spectrum Disorder screening and Assessment (Philofsky, 2008)*

# FORMAL LANGUAGE TOOLS FOR YOUNG or LOWER FUNCTIONING

- *Rossetti Infant-Toddler Language Scale*
- *PLS-5, including Home Communication Questionnaire*
- *DASH-3 Language Scale*
- *DAYC-2 Communication Domain*

# ***ROSSETTI INFANT-TODDLER LANGUAGE SCALE***

- **Ages: Birth through 36 months**
- 2006; Criterion Referenced
- Identifies preverbal and verbal language development problems via three procedures: (1) **parent questionnaire**; (2) **observation** of the child during free play or during interaction with the parent/caregiver; and **direct interaction** by the examiner with the student.
- Assesses Interaction-Attachment, Pragmatics, Gesture, Play, Language Comprehension, and Language Expression.



# ***Preschool Language Scale***

## ***PLS-5***



- **Ages: Birth through 7-11**
- Publication: 2011
- Completion Time: 45-60 minutes; manual scoring
- **Assesses attention to environment and people, play, gesture, vocal development, social communication and integrative language skills**
- Scores/Interpretation: Total language, auditory comprehension, expressive communication standard scores, growth scores, percentile ranks, language age equivalents
- New items added to assess Theory of Mind
- **Home Communication Questionnaire** (links directly to test tasks giving insight on where to begin testing)

# Alternative and Augmentative Communication

- Since 40% of individuals with ASD are nonverbal, **AAC should often part of our assessment**
- Need to check for several factors:
  - ✓ Current methods of communication -are they effective?
  - ✓ What **communication needs** are present in each context throughout their day?



# ***TEST OF AIDED-COMMUNICATION SYMBOL PERFORMANCE (TASP)***



- Determine whether a student is able to understand photo, picture, or icon use.
- Size, number of images on a page

# FORMAL LANGUAGE TOOLS FOR STUDENTS WITH SOME RECEPTIVE AND/OR EXPRESSIVE LANGUAGE ABILITY

- *CELF PRESCHOOL-2*
- *CELF-5*
- *CASL*
- THEORY OF MIND TASK BATTERY
- TAPS-3
- *TEST OF NARRATIVE LANGUAGE*
- Language Sample Analysis (*SALT-2012*)





# CAUTION

**Many formal communication measures do not identify the more subtle nonverbal, reciprocal communication skills that are characteristic of ASD (for those who speak), **nor do they assess these skills within natural social contexts.****

*National Professional Development Center on ASD*

# THEORY OF MIND

ToM is the ability to recognize & understand others' emotions, beliefs, experiences



More simply, the ability to take others' perspectives

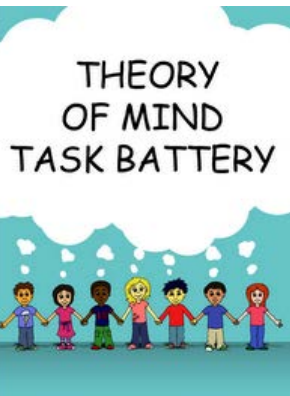
ToM develops over time and is often delayed/impaired for children with ASD, language impairments, ADHD, DHH

# DEVELOPMENT OF TOM

Carol Westby Ph.D

- ToM develops over time and along 2 strands

AGE	COGNITIVE OF MIND	AFFECTIVE THEORY OF MIND	
		Recognizing emotions	Using and manipulating
18- months- 2 years	<ul style="list-style-type: none"><li>• Sense of self</li><li>• Engage in pretend</li><li>• Recognize that different people may like different things</li></ul>	<ul style="list-style-type: none"><li>• Predict that receipt of broken toy will make child unhappy</li></ul>	<ul style="list-style-type: none"><li>• Emergent altruistic behavior</li><li>• Emergence of sense of self</li><li>• Use words <i>happy</i>, <i>sad</i>, <i>mad</i>, <i>scared</i></li><li>• Change doll's affect by bringing suitable object</li></ul>



- Normed on ages 2-13
- Nonverbal students can respond via pointing only
- Includes early, basic and advanced subscales
- Control questions to rule out memory, attention, motivation, language and cognitive variables
- Provides levels of prompting
- Optional justification questions for student with good verbal ability to explain his reasoning
- Qualitative analysis to identify strengths, weaknesses, and areas of intervention

- **Don't underestimate the  
necessity and weight of  
your**

**CLINICAL JUDGMENT!!**

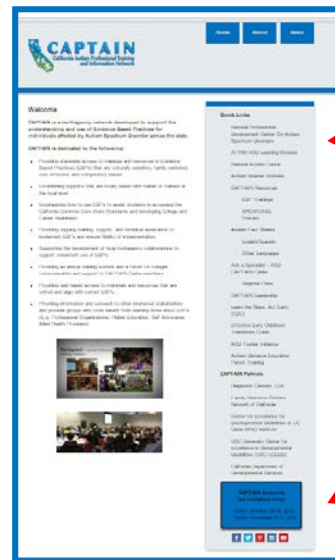
# ASSESSMENT IMPLICATIONS

- Good assessment is the first step in effective intervention!



**CAPTAIN  
Website  
Hosted by  
DCN!**

[www.captain.ca.gov](http://www.captain.ca.gov)



**Links to  
ASD Resources  
Including NPDC  
EBP chart**

**CAPTAIN  
Social Media  
Links**



- Includes resources and trainings for evidence based practices
- Provides links to relevant and up to date resources about autism and EBPs
- Includes NPDC's EBP chart your IEP team can use to identify appropriate interventions/strategies for your student based for target area and age
- <http://www.captain.ca.gov/>



Evidence Based Practice and Abbreviated Definition	Evidence by Developmental Domain and Age (years)																																			
	Social			Comm.			Beh.			Joint Attn.			Play			Cog.			School Ready			Acad.			Motor			Adapt.			Voc.			Mental Health		
	0-5	6-14	15-22	0-5	6-14	15-22	0-5	6-14	15-22	0-5	6-14	15-22	0-5	6-14	15-22	0-5	6-14	15-22	0-5	6-14	15-22	0-5	6-14	15-22	0-5	6-14	15-22	0-5	6-14	15-22	0-5	6-14	15-22			
<b>Antecedent Based Intervention (ABI):</b> Arrangement of events preceding an interfering behavior to prevent or reduce occurrence																																				
<b>Cognitive Behavioral Intervention (CBI):</b> Instruction on cognitive processes leading to changes in behavior																																				
<b>Differential Reinforcement of Alternative, Incompatible, or Other Behavior (DRA/I/O):</b> Consequences provided for desired behaviors that reduce the occurrence of interfering behaviors																																				
<b>Discrete Trial Teaching (DTT):</b> Instructional process of repeated trials, consisting of instruction, response, and consequence																																				
<b>Exercise (ECE):</b> Antecedent based physical exertion to reduce interfering behaviors or increase appropriate behaviors																																				
<b>Extinction (EXT):</b> Removal of existing reinforcement in order to reduce an interfering behavior																																				
<b>Functional Behavior Assessment (FBA):</b> Systematic protocol designed to identify contingencies that maintain an interfering behavior																																				
<b>Function Communication Training (FCT):</b> Replacement of an interfering behavior with communication that accomplishes the same function																																				
<b>Modeling (MD):</b> Demonstration of a desired behavior that results in skill acquisition through learner imitation																																				
<b>Naturalistic Intervention (NI):</b> Intervention strategies that occur with the learner's typical settings and routines																																				
<b>Parent-Implemented Intervention (PII):</b> Parent delivered intervention learned through a structured parent training program																																				
<b>Peer-Mediated Instruction and Intervention (PMII):</b> Typically developing peers are taught strategies that increase social learning opportunities in natural environments																																				
<b>Picture Exchange Communication System (PECS):</b> Systematic 6 phase protocol teaching the exchange of pictures between communicative partners																																				

Evidence Based Practice and Abbreviated Definition	Evidence by Developmental Domain and Age (years)																																			
	Social			Comm.			Beh.			Joint Attn.			Play			Cog.			School Ready			Acad.			Motor			Adapt.			Voc.			Mental Health		
	0-5	6-14	15-22	0-5	6-14	15-22	0-5	6-14	15-22	0-5	6-14	15-22	0-5	6-14	15-22	0-5	6-14	15-22	0-5	6-14	15-22	0-5	6-14	15-22	0-5	6-14	15-22	0-5	6-14	15-22	0-5	6-14	15-22			
<b>Pivotal Response Training (PRT):</b> Pivotal learning variables guide intervention implemented in settings that build on learner interests and initiative																																				
<b>Prompting (PP):</b> Verbal, gestural, or physical assistance that supports skill acquisition																																				
<b>Reinforcement (R+):</b> A response occurring after a behavior resulting in an increased likelihood of future reoccurrence of the behavior																																				
<b>Response Interruption/Redirection (RIR):</b> Use of prompts or distracters during an interfering behavior that diverts attention and reduces the behavior																																				
<b>Scripting (SC):</b> A verbal or written model of a skill or situation that is practiced before use in context																																				
<b>Self Management (SM):</b> Instruction on discrimination between appropriate and inappropriate behaviors and accurate self-monitoring and rewarding of behaviors																																				
<b>Social Narratives (SN):</b> Descriptions of social situations with examples of appropriate responding																																				
<b>Social Skills Training (SST):</b> Direct instruction on social skills with rehearsal and feedback to increase positive peer interaction.																																				
<b>Structured Play Group (SPG):</b> Adult lead small group activities that include typically developing peers and use prompting to support performance																																				
<b>Task Analysis (TA):</b> The process of breaking a skill into small steps that are systematically chained together																																				
<b>Technology-Aided Instruction and Intervention (TAII):</b> Intervention using technology as a critical feature																																				
<b>Time Delay (TD):</b> Delaying a prompt during a practice opportunity in order to fade the use of prompts																																				
<b>Video Modeling (VM):</b> A video recording of a targeted skill that is viewed to assist in learning																																				
<b>Visual Support (VS):</b> Visual display that supports independent skill use.																																				